

PF-0460-2 CIP

What is claimed is:

1. A substantially purified human Particularly Interesting New Cyc-His protein homolog (PINCH-PH) comprising a protein having an amino acid sequence of SEQ ID NO:1.
2. A purified antibody which specifically binds to the protein of claim 1.
3. The antibody of claim 2, wherein the antibody is selected from a polyclonal antibody, a monoclonal antibody, a chimeric antibody, a recombinant antibody, a humanized antibody, a single chain antibody, a Fab fragment, an F(ab')₂ fragment, an Fv fragment; and an antibody-peptide fusion protein.
4. A method of making a polyclonal antibody which specifically binds a protein, the method comprising:
 - a) immunizing a animal with a protein having the amino acid sequence of SEQ ID NO:1 under conditions to elicit an antibody response;
 - b) isolating animal antibodies;
 - c) attaching the protein to a substrate;
 - d) contacting the substrate with isolated antibodies under conditions to form an antibody:protein complex;
 - e) dissociating the antibodies from the complex so formed, thereby obtaining polyclonal antibodies with the specificity of the antibody of claim 2.
5. A polyclonal antibody produced by the method of claim 4.
6. A method of preparing a monoclonal antibody which specifically binds a protein, the method comprising:
 - a) immunizing a animal with a protein having the amino acid sequence of SEQ ID NO:1 under conditions to elicit an antibody response;
 - b) isolating antibody-producing cells from the animal;
 - c) fusing the antibody-producing cells with immortalized cells in culture to form monoclonal antibody producing hybridoma cells;
 - d) culturing the hybridoma cells; and
 - e) isolating monoclonal antibodies from culture.
7. A monoclonal antibody produced by the method of claim 6.
8. A method for using an antibody to immunopurify a protein comprising:
 - a) attaching the antibody of claim 2 to a substrate,
 - b) exposing the antibody to a sample containing protein under conditions to allow antibody:protein complexes to form,
 - c) dissociating the protein from the complex, and
 - d) collecting the purified protein.
9. A method for using an antibody to detect expression of a protein in a sample, the method comprising:
 - a) combining the antibody of claim 2 with a sample under conditions which allow the formation of

PF-0460-2 CIP

antibody:protein complexes; and

b) detecting complex formation, wherein complex formation indicates expression of the protein in the sample.

10. The method of claim 9 wherein the sample is biopsied tissue.

11. The method of claim 9 wherein the complex formation is compared with standards and is diagnostic of prostatic adenocarcinoma.

12. The method of claim 9 wherein the complex formation is compared with standards and is diagnostic of Hodgkin's disease.

13. A composition comprising an antibody of claim 2 and a labeling moiety.

14. A composition comprising an antibody of claim 2 and a pharmaceutical agent.

15. A method for treating prostatic adenocarcinoma, the method comprising administering the antibody of claim 2 to a subject in need of such treatment.

16. A method for treating a cancer, the method comprising administering the antibody of claim 2 to a subject in need of such treatment.

17. A purified agonist which specifically binds the protein of claim 1.

18. A purified antagonist which specifically binds the protein of claim 1.